

*Phelps (A. M.)*

# THE DISCUSSION

WHICH FOLLOWED THE PAPER READ BEFORE

THE NEW YORK STATE MEDICAL SOCIETY,

IN FEBRUARY, 1885,

BY DR. A. VANDERVEER, PROFESSOR OF SURGERY,  
ALBANY MEDICAL COLLEGE, ALBANY, N. Y.

UPON

"SOME PERSONAL OBSERVATIONS ON THE WORK OF MR. LAWSON

TAIT, F. R. C. S., TOGETHER WITH REPORT OF FIVE CASES OF

ABDOMINAL SECTION BY THE WRITER.

BY

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**MR. PRESIDENT :**

I concur so very generally in the paper presented by Prof. Vandever, that it is not without diffidence and regret that I venture to differ with him on any point. His opinions, sir, are redolent of the doctrines of a very distinguished surgeon, for whom I have the highest regard, and of whose doctrines I can say as I can also of this interesting paper, that while I concur in the main, I must be permitted to hesitate about some of the premises.

I do not agree that all there is of antiseptic surgery is perfect cleanliness, and I would be sorry to have this Society, by its silence, commit itself to this idea. It is well known that the ideas of Mr. Tait are antagonistic to the ideas of Mr. Lister, and he has even gone to the extent of characterizing antiseptic surgery as a species of scientific quackery. He also claims that his results without the use of antiseptics are as favorable or better than those of surgeons following the strict "antiseptic methods" of to-day. If this last statement be true, then his method should receive the distinguishing cognomen of Taitism. No other man has ever attained the same results as he without following the "antiseptic method." Taitism, then, is all there is of Listerism, excepting the antiseptics. In other words Listerism and Taitism are identical up to a certain point. At this point Listerism calls into use antiseptics, for an express purpose. Both agree that perfect cleanliness is of the first importance. All great discoverers have met with opposition. The acceptance of grand principles, has, as a rule, been slow, and not until every obstacle and imperfection has been removed by discussions, which are often of the bitterest kind. By this means correct conclusions are arrived at. And so Listerism or Antiseptic Surgery, has run the same gauntlet until, to-day, the greater portion of the profession of the civilized world has been converted to its truths.

The opposition of Mr. Tait to Listerism has, in many particulars, been well founded. To him we owe the knowledge of how much of the good results in operations are due to the antiseptics, and how much to perfect cleanliness independent of them. His objection to the spray and many of the auxiliaries to which Mr. Lister originally attached so much importance, it seems to me is well taken. I heard Mr. Lister remark in his clinic, that of all the antiseptic precautions he considered the spray the least important, and that he was undecided as to whether he should give it up or not. But the objection of Mr. Tait to all there is of the antiseptic method of to-day, it seems to me, is to be regretted. It is true that Mr. Tait, without the use of antiseptics, but by observing every rule of cleanliness almost to a painful extent, has accomplished much, and taught the profession that many of the brilliant results of operators might have been due to perfect cleanliness, and not to the fact of the use of antiseptics. But antiseptic surgery combines cleanliness with the antiseptics, and teaches THAT PERFECT CLEANLINESS CAN NOT EXIST IN



OPERATIVE SURGERY WITHOUT THE USE OF ANTISEPTICS. And here the issue commences between Mr. Lister and Mr. Tait. It seems to me, gentlemen, that we who are wholly uninterested in the differences between Mr. Lister and Mr. Tait only so far as the scientific facts are concerned, are in a position to examine into the question with unbiased minds. We have seen here to-day the beautiful scientific demonstrations of Dr. Hailes, of Albany. We saw the prepared gelatin into which inoculations of various germs were made and observed their growth. We also saw tubes of gelatin in which the various so called pure waters from springs, and wells, and fountains had been mixed, and the following day all had become turbid. We also saw the tube of gelatin with which distilled water had been mixed, and could easily see the forms of life in process of development. Under the microscope the forms of each of these micro-organisms can be discovered. Now add to one of these tubes a solution of bichloride of mercury, and the process of development is at once arrested and the germs are destroyed. It is certain that if any of these were the germs of suppuration and the operator carried them into the wound, he would be quite likely to have suppurative changes take place. In other words he would inoculate the wound with the germs of suppuration. Then again, if the hands be thoroughly cleansed by means of soap and water, and wiped dry with a clean towel, and then plunged into a quantity of clean prepared gelatin, within twenty-four hours the whole mass will become turbid, and under the microscope will be found to be crowded with microscope life. Then again cleanse the hands in the same manner as before, and bathe them in a solution of sublimate 1 to 5,000, and plunge them into the same quantity of prepared gelatin, and after weeks the gelatin will remain clear, and no life manifest itself. These experiments are enough to convince me that a disinfectant will prevent and kill any microscopic germ that is always present in water and which may be the cause of suppuration in the wound. The next question is, will these germs produce suppuration? Experiments demonstrate the presence of the germs of suppuration in all suppurative processes, and they are also found elsewhere. Now, if these germs should be in the water, or in the dressings used in the operation, or if they should be upon the surface of the parts incised, they would be quite likely to be introduced into the wound, and produce the destructive changes which they are known to produce, when introduced by experiment on to fresh cut surfaces. This leads to a brief consideration of the "antiseptic method" of to-day as taught and practiced by the German surgeons, and among them is Dr. Schede, of Hamburg, Neuber and Esmarch, of Keil, Hahn and Bergman, of Berlin, Volkmann, of Halle, Thiersch, of Leipzig, and many others of equal celebrity. First, the parts are carefully washed with soap and water and shaved, then cleansed with a solution of sublimate 1 to 1,000. Towels wrung from the same solution are spread over and about the patient to prevent the instruments from coming in contact with the clothing. The operator's hands should be washed thoroughly and cleansed in the same solution. As the operation pro-

ceeds the wound should be irrigated with the solution until it is closed. The antiseptic dressings are now applied consisting of gauze, bags of wood-wool or moss, and bandages all prepared in a solution of the sublimate under a special formula. When enough of the dressing is applied to prevent the discharges from reaching the atmosphere, redressing will be found unnecessary and the wound will be found healed when the dressings are removed at the end of two weeks. Rise of temperature, the formation of pus, and erysipelas, are seldom seen when this method is followed out to the letter.

I visited many of the hospitals of England and Germany and I invariably found, by consulting the temperature charts, that in hospitals where the antiseptic method as taught by the Germans, was carefully carried out, that the temperature lines were not nearly so crooked as in the hospitals where the antiseptic method was ignored. In the last named hospitals I invariably saw more pus and fewer cases of primary union. In the words of Mr. Lister, "hospital fever and pus after operations are extremely rare," and this can be said of nearly every German hospital.